

Claims

- [c1] 1.A method for providing web-based electronic research and presentation functions via a document creation application, comprising:
- scanning an active document on a computer device operable for identifying relevant keywords;
 - searching at least one database for reference materials relating to said relevant keywords;
 - automatically displaying relevant reference materials on said computer device;
 - converting said reference materials if said reference materials are in a format different from a format used in creating said active document; and
 - displaying said reference materials on said computer device;
- wherein said active document includes data currently being entered or edited by a user on said computer device.
- [c2] 2.The method of claim 1, further comprising:
- prompting said user to select all or a portion of said reference materials;
 - if selected, formatting said all or a portion of said reference materials; and

entering said all or a portion of said reference materials into said active document.

[c3] 3.The method of claim 1, wherein said scanning an active document on a computer device operable for identifying relevant keywords is performed by an intelligent search agent, said method including:
scanning text of an active page for said active document for at least one of:
frequently appearing terms;
frequently appearing phrases; and
specific terms requested by said user;
determining relevance of found terms or phrases resulting from said scanning, said determining relevance of found terms or phrases based upon rules prescribed by said intelligent agent; and
storing relevant results in a temporary storage location operable for performing said searching;
wherein said active page for said active document refers to a page on a computer screen that is currently being created or edited.

[c4] 4.The method of claim 1, wherein said scanning an active document on a computer device operable for identifying relevant keywords is performed by an intelligent search agent, said method including:
scanning entire text of said active document for at least

one of:

frequently appearing terms;

frequently appearing phrases; and

specific terms requested by said user;

analyzing results in context with said entire text of said active document;

determining which of said results are relevant based on said analyzing results in context and in accordance with rules prescribed by said intelligent agent; and

storing relevant results in a temporary storage location operable for performing said searching.

[c5] 5.The method of claim 1, wherein said searching at least one database for

said reference materials relating to said relevant key-words includes searching at least one of:

a local database associated with said computer device;
and

a remote database located in a network location external to said computer device.

[c6] 6.The method of claim 1, wherein said displaying said reference materials on said computer device includes:
intermittently flashing text of said reference materials on a computer screen of said computer device.

[c7] 7.The method of claim 1, wherein said displaying said

reference materials on said computer device includes at least one of:

displaying a Uniform Resource Locator associated with said reference materials on a computer screen of said computer device; and

displaying a Uniform Resource Locator with a preview pane associated with said reference materials on a computer screen of said computer device.

[c8] 8.The method of claim 1, wherein said displaying said reference materials on said computer device includes: displaying text of said reference materials on a computer screen of said computer device in response to a user highlighting a term or section of text within said active document.

[c9] 9.The method of claim 1, wherein said displaying said reference materials on said computer device includes performing at least one of:
displaying images of said reference materials on a computer screen of said computer device in response to a user highlighting a term or section of text within said active document;
displaying images in a preview pane of said reference materials on a computer screen of said computer device in response to a user highlighting a term or section of text within said active document.

[c10] 10. The method of claim 1, further comprising:
displaying text of said reference materials on a projector screen via a presentation application executing on said computer device, said displaying text of said reference materials on a project screen performed in response to a user selecting said reference materials for display;
wherein said projector screen is in communication with said computer device.

[c11] 11. The method of claim 1, further comprising deploying process software for providing said web-based electronic research and presentation functions via a document creation application, said deploying comprising:
installing said process software on at least one server;
identifying server addresses for users accessing said process software on said at least one server;
installing a proxy server if needed;
sending said process software to said at least one server and copying said process software to a file system of said at least one server;
sending the process software to at least a first client computer; and
executing said process software on said first client computer.

[c12] 12. The method of claim 11, wherein said installing said

process software further comprises:
determining if programs will reside on said at least one server when said process software is executed;
identifying said at least one server that will execute said process software; and
transferring said process software to storage for said at least one server.

[c13] 13. The method of claim 11, wherein said sending said process software to said first client computer further includes having said at least one server automatically copy said process software to said first client computer, and running an installation program at said first client computer to install said process software on said first client computer.

[c14] 14. The method of claim 11, wherein said sending said process software to said first client computer further comprises identifying a user and an address of said first client computer.

[c15] 15. The method of claim 11, wherein said sending said process software to said first client computer includes sending said process software to at least one directory on said first client computer.

[c16] 16. The method of claim 11, wherein said sending said

process software to said first client computer includes sending said process software to said first client computer via e-mail.

- [c17] 17. The method of claim 1, further comprising integrating process software for providing said web-based electronic research and presentation functions via a document creation application, said integrating comprising: determining if said process software will execute on at least one server;
- identifying an address of said at least one server;
- checking said at least one server for operating systems, applications, and version numbers for validation with said process software, and identifying any missing software applications for said at least one server that are required for integration;
- updating said at least one server with respect to any operating system and application that is not validated for said process software, and providing any of said missing software applications for said at least one server required for said integration;
- identifying client addresses and checking client computers for operating systems, applications, and version numbers for validation with said process software, and identifying any software applications missing from said client computers that are required for integration;

updating said client computers with respect to any operating system and application that is not validated for said process software, and providing any missing software application for said client computers required for said integration; and
installing said process software on said client computers and said at least one server.

- [c18] 18. The method of claim 1, further comprising on demand sharing of process software for providing said web-based electronic research and presentation functions via a document creation application, said on demand sharing comprising:
creating a transaction containing unique customer identification, requested service type, and service parameters;
sending said transaction to at least one main server;
querying said at least one main server about processing capacity associated with said at least one main server to help ensure availability of adequate resources for processing of said transaction; and
allocating additional processing capacity when additional capacity appears needed to process said transaction, said additional processing capacity being selected from the group of additional capacities consisting of central processing unit capacity, processor memory capacity,

network bandwidth capacity, and storage capacity.

- [c19] 19. The method of claim 18, further comprising recording a plurality of usage measurements selected from the group of usage measurements consisting of network bandwidth, processor memory, storage, and central processing unit cycles.
- [c20] 20. The method of claim 19, further comprising:
summing said usage measurements ;
acquiring at least one multiplicative value associated with said usage measurements and with unit costs; and
recording any such acquired multiplicative value as an on demand charge to a requesting customer.
- [c21] 21. The method of claim 20, further comprising at least one of:
posting said on demand charge on a web site if requested by said requesting customer; and
sending said on demand charge via e-mail to said requesting customer's e-mail address.
- [c22] 22. The method of claim 20, further comprising charging said on demand charge to said requesting customer's account if an account exists and if said requesting customer has selected a charge account payment method.
- [c23] 23. The method of claim 1, further comprising deploy-

ing, accessing, and executing process software for providing said web-based electronic research and presentation functions via a document creation application, said deploying, accessing, and executing process software implemented through a virtual private network, the method further comprising:

determining if a virtual private network is required;
checking for remote access to said virtual private network when it is required;
if said remote access does not exist, identifying a third party provider to provide secure, encrypted connections between a private network and remote users;
identifying said remote users; and
setting up a network access server operable for downloading and installing client software on desktop computers for remote access of said virtual private network;
accessing said process software;
transporting said process software to at least one remote user's desktop computer; and
executing said process software on said at least one remote user's desktop computer.

[c24] 24. The method of claim 23, further comprising:
determining if said virtual private network has a site-to-site configuration for providing site-to-site access, and if said virtual private network is not so available, in-

stalling equipment required to establish a site-to-site configuration for said virtual private network;
installing large scale encryption into said site-to-site virtual private network; and
accessing said process software through said site-to-site configuration with large scale encryption.

[c25] 25. A system for providing web-based electronic research and presentation functions via a document creation application, comprising:
a computer device in communication with at least one server over a communications network, said computer device executing:
a web browser application; and
at least one document creation application;
a data repository in communication with said at least one server, said data repository storing reference materials;
a content generation system comprising:
a graphical user interface;
an intelligent search agent; and
a document conversion tool; and
an active document displayed on said computer device, said active document created by said at least one document creation application.

[c26] 26. The system of claim 25, wherein said content generation system is executed by said computer device.

[c27] 27. The system of claim 25, wherein said content generation system is executed by said at least one server and made accessible to said computer device over said communications network.

[c28] 28. The system of claim 25, further comprising:
a projection screen in communication with said computer device, said projection screen displaying a presentation created via said at least one document creation application;
wherein hypertext indicia displayed on said computer device and said project screen are selectable for including reference materials associated with said hypertext indicia into said presentation.

[c29] 29. The system of claim 25, wherein said intelligent search agent utilizes advanced pattern matching technology operable for identifying relevant keywords and searching reference materials.

[c30] 30. The system of claim 25, wherein said graphical user interface displays search results relating to relevant keywords scanned within said active document, said search results comprising at least one of:
text;
graphical data;

a Uniform Resource Locator associated with said search results;
a video; and
a source of said reference materials;
wherein said search results are retrieved from at least one of:
a local database associated with said computer device;
and
a remote database located in a network location external to said computer device.

- [c31] 31. A storage medium encoded with machine-readable computer program code for providing web-based electronic research and presentation functions via a document creation application, said storage medium including instructions for causing a computer to implement a method, comprising:
scanning an active document on a computer device operable for identifying relevant keywords;
searching at least one database for reference materials relating to said relevant keywords;
automatically displaying relevant reference materials on said computer device;
converting said reference materials if said reference materials are in a format different from a format used in creating said active document; and

displaying said reference materials on said computer device;

wherein said active document includes data currently being entered or edited by a user on said computer device.

[c32] 32. The storage medium of claim 31, further comprising instructions for causing said computer to deploy process software for providing said web-based electronic research and presentation functions via a document creation application, wherein deployment of process software comprises:

installing said process software on at least one server;

identifying server addresses for users accessing said process software on said at least one server;

installing a proxy server if needed;

sending said process software to said at least one server and copying said process software to a file system associated with said at least one server;

sending said process software to at least a first client system;

executing said process software on said first client system;

determining if programs will reside on said at least one server when said process software is executed;

identifying said at least one server that will execute said process software; and

transferring said process software to storage for said at least one server.

[c33] 33. The storage medium of claim 32, wherein said installing said process software further comprises:
determining if programs will reside on said at least one server when said process software is executed;
identifying said at least one server that will execute said process software; and
transferring said process software to storage for said at least one server.

[c34] 34. The storage medium of claim 32, wherein said sending said process software to said first client system includes having said at least one server automatically copy said process software to said first client system, and running an installation program at said first client system to install said process software on said first client system.

[c35] 35. The storage medium of claim 32, wherein said sending said process software to said first client computer further comprises identifying a user and an address of said first client computer.

[c36] 36. The storage medium of claim 32, wherein said sending said process software to said first client computer

includes sending said process software to at least one directory on said first client computer.

[c37] 37. The storage medium of claim 32, wherein said sending said process software to said first client computer includes sending said process software to said first client computer via e-mail.

[c38] 38. The storage medium of claim 31, further comprising instructions for causing said computer to integrate process software for providing said web-based electronic research and presentation functions via a document creation application, wherein integration comprises:
determining if said process software will execute on at least one server;
identifying an address of said at least one server;
checking said at least one server for operating systems, applications, and version numbers for validation with said process software, and identifying any missing software applications for said at least one server that are required for integration;
updating said at least one server with respect to any operating system and application that is not validated for said process software and providing any of said missing software application for said at least one server required for said integration;
identifying client addresses and checking client systems

for operating systems, applications, and version numbers for validation with said process software, and identifying any software applications missing from said client systems that are required for integration;
updating said client systems with respect to any operating system and application that is not validated for said process software, and providing any missing software application for said client systems required for said integration; and
installing said process software on said client systems and said at least one server.

[c39] 39. The storage medium of claim 31, further comprising instructions for causing said computer to implement on demand sharing of process software operable for providing said web-based electronic research and presentation functions via a document creation application, said on demand sharing of process software including:
creating a transaction containing a unique customer identification, requested service type, and service parameters;
sending said transaction to said at least one server;
querying said at least one server about processing capacity associated with said at least one server to help ensure availability of adequate resources for processing of said transaction; and

allocating additional processing capacity when additional capacity is needed to process said transaction, said additional processing capacity being selected from the group of additional capacities consisting of central processing unit capacity, processor memory capacity, network bandwidth capacity, and storage capacity.

[c40] 40. The storage medium of claim 39, further comprising instructions for causing said computer to implement: recording a plurality of usage measurements selected from the group of usage measurements consisting of network bandwidth, processor memory, storage, and central processing unit cycles.

[c41] 41. The storage medium of claim 40, further comprising instructions for causing said computer to implement: summing said usage measurements; acquiring at least one multiplicative value associated with said usage measurements and with unit costs; and recording any such acquired multiplicative value as an on demand charge to a requesting customer.

[c42] 42. The storage medium of claim 41, further comprising instructions for causing said computer to implement at least one of: posting said on demand charge on a web site if requested by said requesting customer; and

sending said on demand charge via e-mail to said requesting customer's e-mail address.

[c43] 43. The storage medium of claim 42, further comprising instructions for causing said computer to implement: charging said on demand charge to said requesting customer's account if an account exists and if said requesting customer has selected a charge account payment method.

[c44] 44. The storage medium of claim 31, further comprising instructions for causing said computer to implement deploying, accessing, and executing process software for providing said web-based electronic research and presentation functions via a document creation application, said deploying, accessing, and executing process software including:
determining if a virtual private network is required;
checking for remote access to said virtual private network when it is required;
if said remote access does not exist, identifying a third party provider to provide secure, encrypted connections between a private network and remote users;
identifying said remote users;
setting up a network access server for downloading and installing client software on desktop computers for remotely accessing said virtual private network;

accessing said process software;
transporting said process software to at least one remote user's desktop computer; and executing said process software on said at least one remote user's desktop computer.

[c45] 45. The storage medium of claim 44, further comprising instructions for causing said computer to implement: determining if said virtual private network has a site-to-site configuration for providing site-to-site access, and if said virtual private network is not so available, installing equipment required to establish a site-to-site configuration for said virtual private network; installing large scale encryption into said site-to-site virtual private network; and accessing said process software through said site-to-site configuration with large-scale encryption; wherein said accessing said process software includes at least one of:
dialing into said network access server; and attaching directly via a modem into said network access server, said modem being selected from the group of modems consisting of telephone dial-up modems, cable modems, DSL modems and wireless modems.